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ARTICLES

The Role of Personal Social Networks in Risk Assessment and Management of Forensic Psychiatric Patients

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Social network factors are usually not accounted for in the clinical practice of risk assessment/management. This article introduces a social network analysis as an instrument to systematically chart the relationships and personal networks of forensic psychiatric patients. During the period 2005 to 2007, the so-called Forensic Social Network Analysis (FSNA) was developed in a Dutch forensic psychiatric hospital. A case study describes the FSNA concepts and shows the benefits of using FSNA as a practical tool for assessment and management of individual risk behavior.

KEYWORDS *social network analysis, forensic psychiatry, risk assessment and management*

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INTRODUCTION

The development and application of risk assessment instruments have recently gained importance in the forensic field. These instruments are valid checklists of known risk factors that will support clinical judgment about the level of risk involved. An example of a structured risk assessment instrument used worldwide is the Historical Clinical Risk Management (HCR-20) developed by Webster, Douglas, Eaves, and Hart (1997). The HCR-20 measures future risk of violence among mentally disordered offenders and also has good psychometric scores with non-mentally disordered offenders. This instrument consists of 20 items: 10 historical items,¹ 5 clinical items,² and 5 risk-management items³ scored on a scale of zero to two. Several studies have shown that the HCR-20 total score and especially the historical and risk sub-scales are good predictors of violent behaviour and other offences after discharge (Dempster, 1998, Douglas, Ogloff, & Hart, 2003; de Vogel, Ruiter, Hildebrand, Bos, & van de Ven, 2004; de Vogel, 2005; Hildebrand, Hesper, Spreen, & Nijman, 2005; Gray, Taylor, & Snowden, 2008). Although the HCR-20 and other structured risk-assessment instruments can predict a significant part of future risk behavior, these instruments have several limitations. First, the prediction of future risk is especially based on group-level analysis rather than on individual-level analysis. Group results are not straightforward to translate into individual results (Hájek & Hall, 2002; Hart, Michie, & Cooke, 2007). Some individuals are classified as “high-risk” but do not re-offend, the so-called false-negatives. Other individuals classified as “low-risk” may re-offend, the so-called false-positives. A second limitation is the dynamic and temporal nature of risk behavior and risk assessment. Changing a person’s setting or social context influences the risk of recidivism (Monahan, 1981). For example, during treatment a patient is not in contact with drug users, which results in a low-risk situation. However, after treatment the patient may restart these friendships, resulting in a higher-risk situation. The preceding limitations can be minimized by integrating social network factors in the risk-assessment procedure. A social network approach offers advantages because it enables the focus on the individual dynamic risk factors such as access to victims, relationship instability, “bad friends,” and (a lack) of personal support. It provides opportunities for both risk assessment and risk management. Risk assessment comprises the determination of the risk factors and the level of risk. Based on this risk assessment, the dynamic risk factors become targets for intervention to minimize, monitor, and control the risk. This process is called *risk management*. The role of social networks in

¹ Historical items (H-items): previous violence, age at first violent offense, family and vocational background, and etcetera.

² Clinical items (C-items): current symptomatology and psychosocial adjustment.

³ Risk management items (R-items): release and treatment plan, necessary services and support.

risk assessment and risk management can be twofold: (1) to define the social environment of a patient and diagnose which individuals and social contexts may result in new risks and (2) to manage future individual (risk) behavior. This article introduces a social network analysis (SNA) as an instrument to systematically chart the relationships and personal networks of forensic psychiatric patients and to assess the influence of these personal networks on the likelihood of recidivism. During the period 2002 to 2007, the so-called Forensic Social Network Analysis (FSNA) was developed by Spreen (Pomp, Hendriks, Kremer, & Spreen, 2007). This method is currently being examined in nine Dutch forensic psychiatric hospitals. The remainder of this contribution is structured as follows. First, some major theoretical considerations and empirical findings about social environment and risk behavior are presented. Second, the FSNA method is described. Third, a case study shows the FSNA as a practical tool for assessment and management of individual risk behavior. Finally, the conclusions and limitations of the study and suggestions for future research are discussed.

In the sociological, criminological, and psychological literature, the importance of an individuals' social environment to explain and assess individual risk behavior is frequently mentioned. Criminal behavior is often explained by Hirschi's "social control" theory (1969, 1977). Social control and social ties prevent individuals from engaging in criminal activities. In the tradition of Hirschi's social control theory, several studies supported Hirschi's ideas about "attachment." When individuals become more attached to their parents, they are far less likely to become delinquent (Knight & Tripodi, 1996; Sokol-Katz, Dunham, & Zimmerman, 1997). A second major theoretical tradition is Sutherland's differential association/social learning theory. According to Sutherland (1947), criminal behavior is learned through social contacts within intimate personal networks. Sutherland stated that for the explanation of criminal behavior, more attention is needed on the interaction between an individual and his/her social environment. Haynie (2002) reported that one of the most consistent findings in the literature involves the association between friends' delinquent behaviour and a respondent's own delinquency. Adolescent who have delinquent friends tend to report higher levels of delinquency than adolescents with fewer or no delinquents friends. A third theory is the age-graded life course that was introduced by Sampson and Laub (1990). They theorized that "informal social controls"—such as involvement in family, work, and school—mediate structural context and explain criminal involvement, even in the face of the underlying level of criminal propensity. Sampson and Laub acknowledge that individuals differ in their underlying criminal propensity and in how likely they are to place themselves in troublesome or criminogenic situations' (Delisi, 2005, p. 58). Sampson, Laub, and Wimer (2006) found evidence that supports the inference that marriage causally inhibits crime over the life course: In a study of 500 high-risk boys followed up from adolescence to age 32, being married

was associated with an average reduction of approximately 35% in the odds of crime compared to the unmarried status for the same man.

FORENSIC PSYCHIATRIC PATIENTS AND THEIR SOCIAL NETWORKS: AN UNKNOWN AREA

Though the well-known literature and related empirical findings have shown the importance of social relations in explaining criminal behavior, little is known about the social networks of forensic psychiatric patients. Swanson, Swartz, Estroff, Borum, Wagner, and Hiday (1998) argued that social contacts in general might be difficult for mentally disordered offenders. Social contacts provide a buffer and comfort from distress that may decrease the need for violence. For example, positive social networks and emotional support influence the way individuals with mental disorders use mental health services (Kumar & Browne, 2008). Social contacts may also add to conflicts, stress, and increased potential and opportunity for violence (Swanson et al. 1998). This is illustrated by the fact that family members are the most likely victims of individuals with an aggressive disorder (e.g., intimate partner violence; Chan, 2008; Estroff, Swanson, Lachicotte, Swartz, & Bolduc, 1998; Hyde, 1997). Social networks of forensic psychiatric patients may positively or negatively influence the patients' mental health and their (risk) behavior.

We will take a closer look at the possibilities of using social network characteristics in terms of assessing individual risk behavior. According to Monahan, Steadman, Silver et al. (2001), the inclusion of situational variables is the most pressing current need in the field of violence prediction because individuals operate within a certain social world and shape their social world in accordance to their needs (Kalish & Robins, 2005). Changing dynamic social and personal circumstances in the future may cause behavioral changes that affect the risk (and severity) of future recidivism (Ward & Beech, 2004). Previous research points to the importance of family members and peer groups and their critical roles in supporting or discouraging violent behavior (Monahan, 1981; McCarthy & Hagan, 1995; Warr, 2002). Despite the influence of social and environmental factors on criminal behavior, social relationships and patterns have been only partially taken into account in the clinical practice of risk assessment. Risk assessment is a kind of snapshot whereas the risk for relapse should be seen as a dynamic feature that makes the management of risk very important. The fact that risk-assessment items were not integrated in social network tools for forensic psychiatric patients must be seen as a shortcoming. There is a lack of practical tools to focus on these dynamic items though there are many social network

tools for managing social networks, but they do not especially focus on the “risk context” of forensic psychiatric patients. For example, the eco-map designs a graphical representation of an individual’s place within a social context, such as the family or friend context (Hartman, 1995), but does not focus on the risk contexts of forensic psychiatric patients. To assess and manage the risk factors of forensic psychiatric patients, a combination of risk-assessment instruments and the practical social network tools is required. Bem and Funder (1978) created person/situation templates to characterize the individual whose behavior is to be predicted. They recommended that behavioral scientists should describe individuals in terms of their behavior in a set of hypothetical ideal situations. The need for integrating contextual and environmental factors in the prediction of violent behavior was also present in the classic work by Monahan, *Predicting Violent Behavior: An Assessment of Clinical Techniques* (1981). Monahan described the significance of using both a statistical approach and considering situational variables of the person when predicting violence behavior. Risk-assessments tools need to consider the situational community context into which the offender is released, specifically concerning access to potential victims (Sjöstedt & Grann, 2002). An approach to consider social network factors is to focus on personal social networks of forensic psychiatric patients.

Theoretical Basis of Forensic Social Network Analysis

To provide network information, the Forensic Social Network Analysis (FSNA) has been developed by Spreen. The purpose of the FSNA is to weight the relationships and network members of a forensic psychiatric patient in terms of risk (and severity) of recidivism. The FSNA method is built upon three theories: (1) the social production function theory (Lindenberg, 1996; Ormel, Lindenberg, Steverink, & Verbrugge, 1999); (2) the social capital theory (SCT; Spreen, Völker & Flap, 2002); and (3) the social competence model (Bartels & Spreen, 2005). The social production function theory identifies two ultimate goals—physical well-being and social well-being—that all humans seek to optimize and five means by which these goals are achieved: stimulation, comfort, status, behavioral confirmation, and affection. Network partners can be important resources for a patient to get access to sources of well-being. The SCT is based on the social resource hypothesis. The more social capital a person has, the better individual goals can be achieved. Social capital does not always lead to positive outcomes. Examples of the negative side of social capital are criminal friends and the presence of drugs in the personal network. One network member can also constitute a positive *and* a negative influence on patients’ behavior (negative versus

positive social capital). Such a network member is qualified as an “ambivalent” network member. For example, a patient receives practical support from someone, but this person also encourages drinking alcohol. In the perspective of the SCT, it is important to know what the network partners have to offer and how much the patient values these features (e.g. skills, jobs, personal support). Knowledge about the number of criminal friends and their proportion in the patients’ network is essential. Finally, according to the social competence model, behavior problems arise when there is a discrepancy between the individual’s skills and tasks. In this model, a committed crime can be seen as a result of the imbalance between the tasks, especially in relationships of the patient and his or her network members, and the skills that are required for these tasks. The patient has to learn the skills that are required for a crime-free future (Bartels & Spreen, 2005). The arguments and discussion summarized heretofore make clear that the FSNA method can be an integration of both the risk assessment and social network approaches.

Reliability and Validity of the FSNA Method

The FSNA method uses three steps (Bem & Funder, 1978; Monahan, 1981).⁴ In step one, the next question is central: “Which network developments (relational and social dynamics) in combination with the crime context were specific for the patient?” In step two, “What are the expected network developments (relational and social dynamics) in the current situation and the near future?” will be asked. The third step exists of comparing the current (future) network and the past network and answering the following question: “What are the similarities and differences between these networks?” To answer these questions, relevant data are needed. The FSNA method uses various data resources to encounter the patients’ social network and the contacts of the network members. The data collection depends not only on the input of the patient, because the patient may withhold relevant information as speaking the truth could, for example, have an adverse effect on the length of stay in the forensic hospital. In the FSNA method, this problem will be solved by using the snowball sampling method. This is a frequently used data collection method in qualitative studies of hidden populations (Spreen, 1992; Spreen & Zwaagstra, 1994). The main advantage of this method is that it allows one to build up large samples of subjects that might otherwise be very difficult to encounter (Dunn & Ferry, 1999). The

⁴ Bem and Funder model (1978) poses three questions (Monahan, 1981): (1) What characteristics describe the situations in which the person react violently; (2) what characteristics describe the situations which the person will confront in the future, and (3) how similar are the situations the person will confront in the future to those that have elicited violence in the past?

first stage of snowball sampling is to study the patient file to get familiar with his or her social contacts (*first opportunity to collect names*). The second stage is to ask the patient about his or her social network members and their roles (examples of network members are family members, partner, [best] friends, neighbors, colleagues, sport teammates, etc.; *second opportunity to collect names*). The third stage is to ask the patient from whom he or she has received social supports or expects social support (*third opportunity to collect names*). The fourth stage is to interview some selected network members. Each network member is asked to name individuals who (1) are friends of the patients, (2) are common friends of the patient and the network member, (3) provide social support for the patient, and (4) have a positive or negative influence on the patient (*fourth opportunity to collect names*). The fifth stage is to combine the data from the patient file, the patient interview, and the network members' interviews (multiple informant data). The underlying assumption of the FSNA method is that patients can be influenced in their choices and behavior by others network members. In turn, these others are influenced by the choices or behavior of the patient. Further, network members can also constitute an indirect positive and negative influence on the patient. It is important to know the individuals whom the patients' network members will (frequently) meet when the patient reenters society. To be able to get this information, the FSNA method considered a patients' second-order network (Figure 1). A second-order network consists of the relations of the network members of the patient. A first-order network consists of the direct relations between the patient (called *ego*) and her or his network members (often called *alters*). Figure 1 illustrates the difference between first-order and second-order networks. In the next paragraph, on the basis of a anonymous case, the FSNA method will be explained.

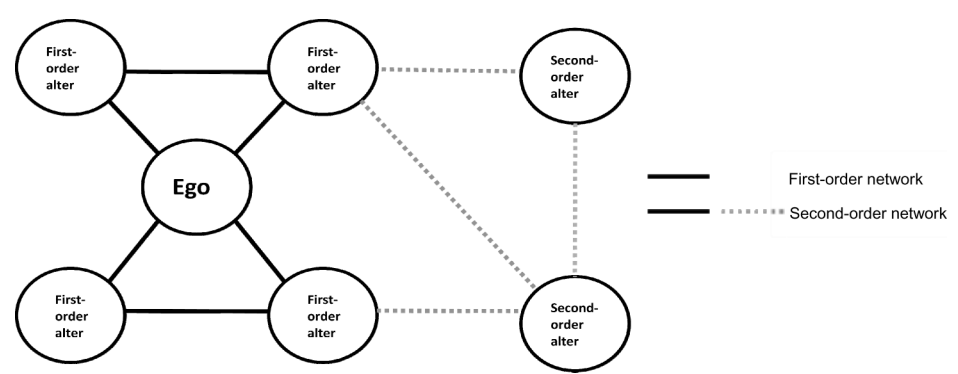


FIGURE 1 First- and Second-Order Networks.

CASE STUDY

In this paragraph, the FSNA method is illustrated by combining several empirical single-case studies into one multiple-case study (Stake, 2005). The purpose of the case study is to describe the FSNA concepts and to show the benefits of using FSNA as a practical tool for the assessment and management of individual risk behavior. The case is about a patient, Dave, treated in a Dutch forensic psychiatric hospital. Patient Dave received a sentence that contains a TBS. TBS is a Dutch penal law procedure (Art. 37 a, b of The Netherlands Criminal Code) for detention under a hospital order of mentally disturbed violent offenders. The TBS measure is considered only for offenders who suffer from a personality disorder or a serious mental health disorder and have committed an offence with a criminal threat of 4 years or more. The purpose of the TBS measure is to protect the safety of society and citizens or of property against the risk posed by the convicted offender (Ministry of Justice, 2008).

The Patient File

Relevant background information was collected about Dave, such as crime, life history, psychiatric diagnosis, social/relational, and offence history. Dave committed several robberies and physical assaults of individuals. He was diagnosed as schizophrenic. The symptoms were “delusions of grandeur” (Dave believed he had special abilities and powers) and “delusions of reference” (Dave believed that random events, objects, behaviors of others in his environment were directly related to him). Dave was born in Surinam. At a young age, he went to the Netherlands with his parents and his step-sisters. After some years, his parents divorced, and his mother took care of the children. Dave was an average student in primary school. He did well in the first years of secondary school. Suddenly, at the age of 15, Dave's behavior changed. He became aggressive toward his mother and committed several robberies together with a few friends. School was no longer important to Dave. In the opinion of Dave's mother, Dave's behavior was influenced by “evil spirits.” Dave was trying to get a job, because he did not attend school any longer, but he did not succeed. Despite not earning money, Dave decided to live on his own. After some months, his neighbors called the police, because Dave showed aggressive behavior when he was on the streets. Dave was admitted into a psychiatric hospital and was diagnosed with schizophrenia. Dave took his medication and became less aggressive. After a while, he got a new house, but very soon he was evicted for not paying his rent. Dave decided not to take his medication any longer. For some weeks, Dave was living with his mother, but she did not tolerate his inappropriate behavior. Dave chose to live on the streets. He was using

drugs and had a “relationship” with a girl who also lived on the streets. During this relationship, Dave visited prostitutes. Furthermore, Dave had several street friends who earned their money from street robberies and selling drugs. Together with these friends, he committed a number of robberies. Using drugs resulted in the increase of symptoms of schizophrenia such as the delusions of grandeur. As a result, Dave was aggressively correcting people on the street, when their behavior was inappropriate in his opinion. His corrections consisted of beating these individuals. Dave was arrested and received the TBS measure. Dave received treatment for several years. In the current situation, Dave has unsupervised leaves about two times per week (according to the TBS treatment, returning an offender to society can be achieved only by gradually granting the patient more liberties). This is possible only if the risk of recidivism has been reduced to an acceptable level. Steps to more liberties are first supervised leave, then unsupervised leaves; after these steps, “transmural” leave may be granted (this involves the person’s staying outside the clinic under the supervision and responsibility of the clinic). Finally, a probationary leave may be granted. In the case of probationary leave, patients can return to society under certain conditions (Ministry of Justice, 2008)). When Dave started treatment, he often used drugs. The last year, his urine controls were clean. However, Dave has mentioned several times that he is thinking about drugs. Dave takes medication to reduce the symptoms of schizophrenia. In the clinic, there are doubts whether Dave will take his medication when he gets more liberties. The clinic has discovered that Dave sometimes went to prostitutes during his leaves. He argues that these visits are spontaneous. Dave is working a few days per week in the clinic. When he is supported by his boss, the work goes well.

Interviewing the Patient and the Network Members Using a Standardized Questionnaire

The goal of this interview is to obtain a clear figure of a set of variables. Dave was asked to describe his first-order alters of (1) his past network at the moment of the crime, (2) his current network, and (3) his “return network.” Dave will likely contact this return network upon reentering society. The first-order alters were collected by asking Dave about his contacts in different roles/contexts. For example, the first part of the questionnaire focuses on the contact with family members, partner(s), friends, colleagues, people living in the same neighborhood, people from church or sport clubs, and the like. Per time period, Dave was asked from whom he has received social supports or expects social support, such as financial support, emotional support, and practical support. Information about each network member was given by Dave, such as personal variables (occupation, education, marital

status and memberships, etc.), variables regarding the relationship to Dave (the duration, origin, context, frequency, initiatives of contact, etc.), and variables that show potential risks (criminal record, psychiatric problems, drug-usage, alcoholism, aggression, or problematic way of life). In Dave's case, his personal social network consisted of his mother, his girlfriend, and four friends. A selection of Dave's social network variables at the moment of the crime is shown in Table 1.

Furthermore Dave was asked to give his perception of the relations between his first-order alters. In Dave's network, there was no contact between the mother and the girlfriend, the mother and the friends, and the girlfriend and the friends. Figure 2 shows Dave's network at the moment of the committed crime.

In the current situation (during treatment), Dave has contact with his mother, his new girlfriend, and two friends. Focusing on his "return" network, in Dave's opinion there will be no changes. He is satisfied with his current network. Dave has a relationship with a married woman, which is not supported by the clinic. Dave shows no empathy for the woman or her husband (Dave has no feelings about guilt) and is primarily focuses on his sexual needs. He is not emotionally attached to the woman. Dave is still in contact with his mother. In the clinic, there are no friendships between Dave and other patients. In his opinion, he is a better person and has more

TABLE 1 Social Network Characteristics at the Moment of the Crime

Role	Duration of Contact	Occupation	Frequency	Initiatives	"Potential Risks"	Social Support
Mother	Dave's entire life	None	Once a week	Both	None	Practical
Girlfriend	One month	None	Every day	Both	Drug-usage, problematic way of life	Emotional, practical, Financial
Friend	Five years	No legal job	Every day	Both	Drug-usage, problematic way of life, criminal record	Emotional, practical
Friend	Four years	No legal job	Every day	Both	Drug-usage, problematic way of life, criminal record	Emotional, practical
Friend	One year	No legal job	Every day	Both	Drug-usage, problematic way of life, criminal record	Emotional, practical
Friend	Six months	No legal job	Every day	Both	Drug-usage, problematic way of life, criminal record	Emotional, practical

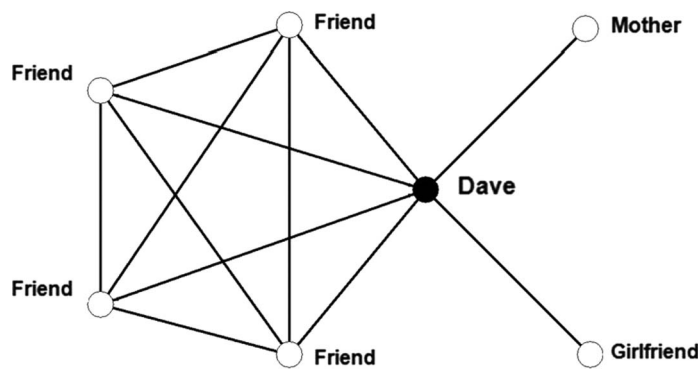


FIGURE 2 Illustration of Social Network at the Moment of the Crime.

skills than the other patients. Dave is correcting the other patients, when he thinks their behavior is inappropriate, sometimes in a (non-) verbal aggressive way. Dave believes that he can improve the world. He loves expensive clothes and wants to be a macho man. According to Dave, he has two good friends. When there is contact, Dave calls his friends; they are not calling Dave. In Dave’s perception, the quality of these contacts is not changed in comparison with their friendship in the period of the committed crime. One of his friends earns his money in the sex industry, the other is working in a coffee shop (Dutch shops selling soft drugs). A selection of the social network variables of the current and future situations is shown in Table 2.

Dave was asked to give his perception of the relations between his first-order alters in the current and future situations. There are no contacts between the mother and the girlfriend, the mother and the friends, and the girlfriend and the friends. Focusing on the future network, in Dave’s opinion,

TABLE 2 Social Network Characteristics of Current (and Future) Situation

Role	Duration of Contact	Occupation	Frequency	Initiatives	“Potential Risks”	Social Support
Mother	Dave’s entire life	None	Two times a week	Both	None	Emotional, practical
Girlfriend	Four months	Hairdresser	Every day	Both	Psychiatric problems	Emotional, practical.
Friend	Ten years	Working in the sex industry	Once a week	Dave	Criminal record	Emotional, practical, financial
Friend	Nine years	Working in a “coffee shop” (Dutch shops selling small quantities of soft drugs)	Once a week	Dave	Drug-usage, criminal record	Emotional, practical

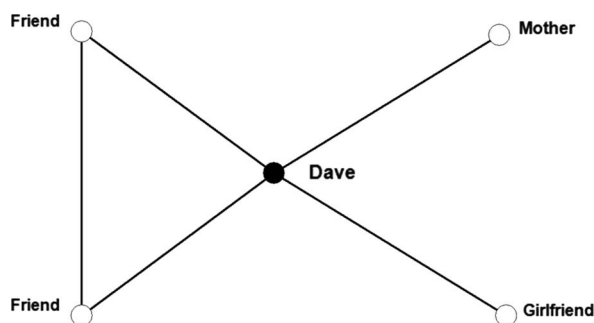


FIGURE 3 Social Network of Current (and Future) Situations.

there will be no changes. Figure 3 shows Dave's network of current and future situation.

Based on the patients' interview data, the FSNA researcher decides which network members will be interviewed. Those people, who can supply the most essential information concerning the patient, are selected. Ideally, from every domain a network member is interviewed. For instance, a family member, a friend, a colleague, a neighbor, and so on. In Dave's case, the FSNA researcher has selected Dave's mother (domain: family), his girlfriend (domain: partner), and one of his friends (domain: friends). Dave's selected network members were prepared to participate in the social network interview. In the network member interviews, the same variables as in the patient interview are collected (e.g., the personal and social support variables). Some additional questions are asked concerning the network members' opinion about patients' ability to remain crime free. Examples of these questions are "Do you have confidence that the patient can have a crime-free future, is the patient motivated to take his medication, or what is necessary to accommodate a successful return to society?" To encounter the hidden network of the patient, network members are asked to mention the names of individuals who (1) are friends of the patients, (2) are common friends of the patient and the network member, (3) provide social support for the patient, and (4) have a positive or negative influence on the patient.

To illustrate the benefits of interviewing network members, a selection of the interview data is given. Dave's mother stated that her opinion about the course of Dave's behavior is the same as in the period before the committed crime. Her son's behavior is influenced by evil spirits. In his mother's opinion, healing these symptoms can occur only when these evil spirits are expelled. Focusing on the unbalanced expectations between Dave and his network members or between different network members, Dave's friend clarifies that Dave overestimates the friendships with both of his friends. In reality, the two friends do not want frequent contact with Dave when he reenters society. The differences in expectations between Dave and his

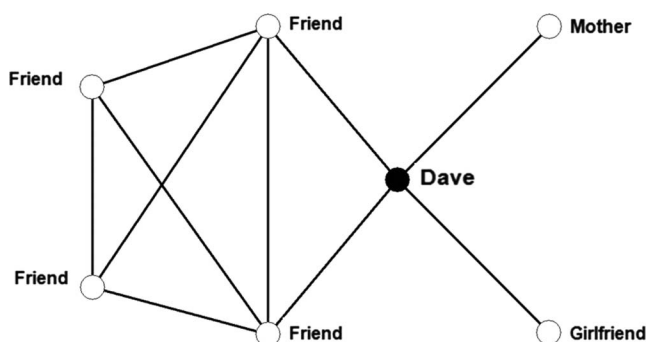


FIGURE 4 Visible and Hidden Social Network after Interviewing the Network Members.

network members are important to identify to improve risk management. An assumption of the FSNA is that each existing misperception may lead to stress when the patient reenters society. If clinicians are aware of this information during treatment, interventions become possible, such as telling the patient about his or her “real” social support system and helping her or him to build and expand a social support system. Using the snowball procedure, some hidden structures are estimated in Dave’s current social network. Dave’s friend mentioned that he and Dave’s other friend are in contact with two old friends of Dave’s. At the moment of the crime, these friends were participating in Dave’s criminal activities. These two friends have carried on with their criminal activities. In Figure 4, Dave’s “visible” and “hidden” network are visualized.

This information shows the importance of encountering the “hidden” structures of networks of forensic psychiatric patients. In this case, the encountered hidden structure implies risk because these individuals are criminals. In other cases, it is also possible to encounter protective individuals.

The Analysis and Interpretation of the Data

The analysis and interpretation of the data are focused on the similarities and differences between the network at the moment of crime and the current/future networks. The aim of this comparison is to estimate whether there are positive or negative changes in Dave’s social network linked to his risk of recidivism. There are many similarities between the network at the moment of crime and the current/future networks (Figure 5).

The first-order network alters of the current and likely future network are mostly the same as the alters of the network at the time of the offense. Dave got a new girlfriend, but his attitude toward relationships is unchanged. The relation is primarily focused on his sexual needs. For this purpose,

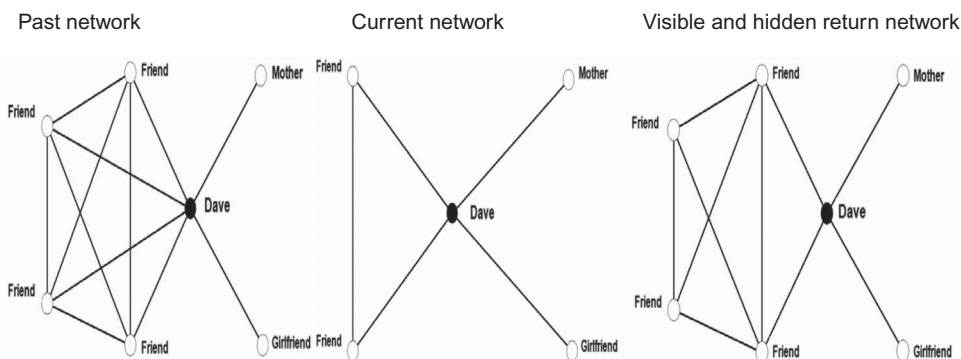


FIGURE 5 The Three Social Network Situations.

he also visits prostitutes. The positive relations in both networks are the relations with his friends, although these friendships are more important for Dave than for his friends. In the current situation, his friends have legal jobs, but these are “risk” jobs considering Dave’s risk factors : One is selling drugs, and the other is working in the sex industry. Also, their contacts with two old friends of Dave’s may be harmful. When Dave is visiting his two friends, he may meet these old friends, who have carried on with their criminal activities. Dave’s attitude (macho man, feeling better than the other, respecting criminal behavior, etc.) is a major problem. He is not motivated to make friends with individuals who have other attitudes or characteristics. Also, his idea that he can improve the world and his correcting attitude is linked to his risk behavior (aggressively correcting people on the streets). Dave is not intrinsically motivated to take his medication, though the rules of the clinic require medication compliance. If Dave wants to obtain more liberties, motivation by other individuals is essential. In Dave’s current/return networks, these individuals are not present. The notion that his mother still assumes her son’s behavior is influenced by evil spirits is risky. Based on this FSNA information, we assessed negative social network conditions for Dave’s future behavior. Some specific individual risk management interventions can be formulated. *Psycho-education*: It is crucial for Dave and his mother to learn about the mental illness and the importance of Dave’s medication use. Attention is needed to the culturally driven opinion of Dave’s mother about his mental illness; the mother’s assumption that her son’s behavior is influenced by evil spirits is risky. *Social skills training*: It is important to motivate Dave to form close friendships with non-criminals with no-risk jobs and to teach him more social skills. *Intimate relationship skills course*: Dave’s attitude toward intimate relations is unchanged. An intimate relationship may provide emotional attachment, social support, and stability. Dave can be supported to follow a relationship skills course, to achieve intimacy, not solely focus on his sexual needs.

These risk-management suggestions can help the clinician to intervene during Dave's treatment. The aim is to minimize, monitor, and control these dynamic risk factors.

CONCLUDING REMARKS

The recognition that social networks play a role in risk assessment and risk management is not new. For instance, Monahan et al. (2001) stated that inclusion of situational variables is currently required in the field of violence prediction because an individual operates within a certain social world (Kalish & Robins, 2005). Bem and Funder (1978) first addressed possibilities for practical clinical risk assessment tools. However, until now, practical social network tools, which focus on assessing risk behavior, were not available. In this article, the FSNA method was introduced as a practical tool for managing future risk and stimulates protection. The purpose of the FSNA is to value the relationships and network members of a forensic psychiatric patient in terms of risk (and severity) of recidivism. The FSNA can help clinicians to gain more insight into the interactions between the individuals' environment and their behaviors and might facilitate the prevention of risk behavior. Based on the FSNA data, clinicians are able to formulate specific individual risk-management interventions. The results of the case study showed the potential of using the FSNA. For example, at the moment of crime, the patient's friendships with criminals, drugs dealers, and users were very important to him because they gave him status and access to drugs. In the TBS situation, the patient's attitude has not changed: He still respected criminal behavior. Interviewing the patient's network members enabled us to discover that his friends were still in contact with two "old friends" of the patient who carried on with their criminal activities. These old friends might therefore increase patients' risk of recidivism. The FSNA analysis indicates that there is still a risk that the patient will be negatively influenced by his personal network. This article does not address the methodological problems related to the FSNA, such as the reliability and validity checks of the FSNA and the percentage of dropouts during the FSNA procedure, because this method is still in development. Future research should examine the methodological possibilities of this method. Additionally, more attention is needed for building better social network theory within the forensic psychiatric context. In summary, the FSNA allows us to value the relationships and network members of a forensic psychiatric patient in terms of risk (and severity) of recidivism. The FSNA method is currently being tested in a large-scale study in the Netherlands. The results of this ongoing project will provide us with more insight into the possibilities and limitations of the FSNA method. So far, the FSNA method is rather time-consuming, but in the near future, supporting software will be developed to address this

problem. Not only have forensic psychiatric hospitals shown their interest in this new method; Dutch probation officers are experimenting with using the FSNA method in their probation services and aftercare. In their work, the FSNA method will provide support concerning the reintegration of forensic psychiatric patients into the community.

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